

ABSTRACT OF THE DISCLOSURE

A process control instrument includes a circuit board having a control circuit for generating or receiving a high frequency signal. An antenna includes an electrical conductor.

An intrinsic safety circuit couples the control circuit to the antenna and comprises a microstrip

5 transmission line on the circuit board electrically connecting the control circuit to the electrical conductor. A safety stub has a first end electrically connected to the transmission line proximate the electrical conductor and a second end connected to a ground of the control circuit.